

WHAT IS CLAIMED IS:

1. A color wheel filter comprising:
at least two color segments configured to transmit light of corresponding colors; and
at least one other color segment configured to transmit light of substantially the same
color as one of the at least two color segments and further comprising first and
second pluralities of transmissive regions, wherein each region of the first
plurality of transmissive regions substantially has a first transmissivity and each
region of the second plurality of transmissive regions substantially has a second
transmissivity.
2. A color wheel filter according to claim 1, wherein a material is deposited and
patterned to remain only in either the first plurality of transmissive regions or the second plurality
of transmissive regions.
3. A color wheel filter according to claim 2, wherein the material is a semiconductor
processing material.
4. A color wheel filter according to claim 3, wherein the semiconductor processing
material is a material selected from the group consisting of: silicon dioxide; silicon nitride; and
amorphous silicon.

5. A color wheel filter according to claim 3, wherein the semiconductor processing material is a dielectric.

6 A color wheel filter according to claim 3, wherein the semiconductor processing material is deposited by a method selected from the group consisting of: spin-on glass deposition; chemical vapor deposition; physical vapor deposition; ion beam deposition; and glass frit deposition.

7. A color wheel filter according to claim 2, wherein the material is configured to substantially absorb incident light.

8. A color wheel filter according to claim 2, wherein the material is silicon dioxide coating.

9. A color wheel filter according to claim 2, wherein the material is a deposited chrome coating.

10. A color wheel filter according to claim 1, wherein the at least one other color segment is adjacent to at least one of the at least two color segments having substantially same color as the at least one other color segment.

11. A color wheel filter according to claim 1, wherein the at least one other color segment is included in at least one of the at least two color segments having substantially same color as the at least one other color segment.

12. A color wheel filter according to claim 1, wherein the first and second pluralities of transmissive regions are randomly shaped regions.

13. A color wheel filter according to claim 1, wherein one of the first and second pluralities of transmissive regions includes circularly shaped transmissive regions having a diameter of at least about 0.1 millimeter.

14. A color wheel filter according to claim 13, wherein a cumulative area of the one of the first and second pluralities of transmissive regions that includes circularly shaped transmissive regions, is in the range of about 6% to 12% of an area of the at least one other color segment.

15. A video display system comprising:

a light source;

a light modulator; and

a color wheel filter coupled between the light source and the light modulator, wherein the

color wheel filter comprises:

at least two color segments configured to transmit light of corresponding colors;

and

at least one other color segment configured to transmit light of substantially the same color as one of the at least two color segments and further comprising first and second pluralities of transmissive regions, wherein each region of the first plurality of transmissive regions substantially has a first transmissivity and each region of the second plurality of transmissive regions substantially has a second transmissivity.

16. A video display system according to claim 15, wherein a material is deposited and patterned to remain only in either the first plurality of transmissive regions or the second plurality of transmissive regions.

17. A video display system according to claim 16, wherein the material is a semiconductor processing material.

18. A video display system according to claim 17, wherein the semiconductor processing material is a material selected from the group consisting of: silicon dioxide; silicon nitride; and amorphous silicon.

19. A video display system according to claim 17, wherein the semiconductor processing material is a dielectric.

20 A video display system according to claim 17, wherein the semiconductor processing material is deposited by a method selected from the group consisting of: spin-on glass deposition; chemical vapor deposition; physical vapor deposition; ion beam deposition; and glass frit deposition.

21. A video display system according to claim 17, wherein the material is configured to substantially absorb incident light.

22. A video display system according to claim 17, wherein the material is silicon dioxide coating.

23. A video display system according to claim 17, wherein the material is a deposited chrome coating.

24. A video display system according to claim 15, wherein the at least one other color segment is adjacent to at least one of the at least two color segments having substantially same color as the at least one other color segment.

25. A video display system according to claim 15, wherein the at least one other color segment is included in at least one of the at least two color segments having substantially same color as the at least one other color segment.

26. A video display system according to claim 15, wherein the first and second pluralities of transmissive regions are randomly shaped regions.

27. A video display system according to claim 15, wherein one of the first and second pluralities of transmissive regions includes circularly shaped regions having a diameter of at least about 0.1 millimeter.

28. A video display system according to claim 28, wherein a cumulative area of the one of the first and second pluralities of transmissive regions that includes circularly shaped regions, is in the range of about 6% to 12% of an area of the at least one other color segment.